

DOCUMENT RESUME

ED 182 775

CS 502 762

AUTHOR Stillman, JeriJayne W.; Hensley, Wayne E.
TITLE She Wore a Flower in Her Hair: The Effect of
Ornamentation on Nonverbal Communication.
PUB DATE Apr 80
NOTE 23p.; Paper presented at the Annual Meeting of the
Central States Speech Association (Chicago, IL, April
10-12, 1980)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Behavioral Science Research; Food Service;
*Interpersonal Relationship; *Nonverbal
Communication
IDENTIFIERS *Communication Research; *Tips; Waiters Waitresses

ABSTRACT

Six waitresses in a restaurant of a large midwestern city agreed to participate in a study of the nonverbal effects of ornamentation. The hypothesis was that diners would leave larger tips for a waitress who wore a flower in her hair than for the same waitress without a flower. During the four nights that data were collected, the waitresses alternated two nights with and two nights without wearing flowers. The data show that the amount of tip substantially increased when a waitress wore a flower in her hair. Separate analyses revealed that each waitress could expect to receive an average of \$0.26 more per person when wearing the flower. While some waitresses increased their tips more than others, every waitress increased in the predicted direction. (RL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED182775

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

She Wore a Flower in Her Hair:
The Effect of Ornamentation on Nonverbal Communication¹

Jerijayne W. Stillman

University of Wisconsin-Milwaukee

Wayne E. Hensley

Virginia Polytechnic Institute and State University

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Jerijayne W. Stillman

Wayne E. Hensley

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Competitively selected paper presented to the Communication Studies interest panel at the Central States Speech Association Convention, April 10-12, 1980.

CS502762

SHE WORE A FLOWER IN HER HAIR:

THE EFFECT OF ORNAMENTATION ON NONVERBAL COMMUNICATION

In first-encounter situations people tend to form distinct and comprehensive impressions of others on the basis of, sometimes, very fragmentary data. This observation is not meant to be invidious in any sense, since initial encounters, almost by definition, must be conducted on the foundation of incomplete information. In fact, the reverse situation is almost inconceivable. Initial social interactions would be all but impossible if we were required to sift through voluminous resumes and references before deciding whether or not to greet another individual. While other writers have focused on the process by which encounters blossom into relationships (8), the attention here is on one feature of impression formation. That is, every subsequent interaction with an individual rests on impressions gathered from past interactions. Hence, the initial impression--even if it is false--forms the basis for any future interaction. Clearly, then, initial impressions are quite important in human relationships.

If we examine the situation of first meetings, it is often the case that a person is observed before any words are exchanged. The very first things which are seen are the other person's physical features--height, weight, sex and approximate age--as well as the way (s)he is dressed. While a first glance may not provide a complete picture of the other person, a considerable amount of information

is acquired before a word is spoken. Operating on the assumption that the first glance of an individual will result in some information acquisition and hence the beginning of an impression, is there anything which may be done to improve the impression which is sent/received? Clearly, our physical features may be modified only slightly if at all. The only real difference we can make in this very first impression situation is by the attire we choose. Only this element of our total appearance may be changed at will to conform to our mood or to the occasion.

There is a growing consensus among communication scholars that attire does convey a definite and well understood "message" (5, p. 149; 10; 11; 16, pp. 147-148; 18; 19, pp. 175-180; 20, pp. 95-98; 25). The real question is not that such a message exists, but how it operates. In general, the message conveyed by attire may be explained within the context of classical conditioning.

Attire may be viewed as an unconditioned stimulus (UCS) since "at the outset of an experiment it evokes a regular and measurable response" (17, p. 46). As we shall see, the response is consistent across a variety of contexts and situations. Almost without exception, persons who are well dressed receive positive reactions while those who are poorly dressed experience much less favorable reactions. It should be emphasized that these unconditioned responses (UCR) on the part of subjects are in no way prompted by any direct action of the experimenters. Whatever conditioning may have occurred prior is, of course, beyond the control of any individual experimenter.

The supporting evidence is quite clear that dressing well yields handsome rewards. Well dressed persons suffer fewer personal space invasions than do others (9), they receive more assistance with faulty equipment (15), they are picked up more often when hitchhiking (7), they obtain directions more easily (26) and money they have mislaid is more often returned to them (3). All in all, being well dressed (UCS) obviously enhances the probability of the occurrence of a favorable response (UCR). Clearly, there is a link between the UCS and the UCR. The nature of that link is the message of attire.

Going further, there is direct evidence that people make judgments of others based on the cues provided by attire (4, 14, 24, 32). Nor are these judgments totally a matter of whim. The available evidence points to the fact that clothing preferences actually do relate to personality differences among individuals (1, 13, 28). Finally, there is evidence that the type of attire worn does indeed bear a relationship to the behavior exhibited by the wearer (6, 21).

In sum, we know that there are systematic and observable responses to clothing. The existence of a message is strongly implied. Second, we know that attire per se does seem to have some relationship to personality and behavior. There does seem to be a message being sent. Finally, we know that people do make judgments of others based on the attire those others are wearing. Some sort of message is being received. What we do not know is how loud the message of attire must be before it is received. Obviously, it is not necessary to be

dressed in a clown suit to announce that it is a good day and one is happy. Nor is it necessary to be placed in a body cast to portray that one is not feeling well. But how blatant, or how subtle the message must be to be understood is unclear.

Most studies of the effects of attire have been concerned with gross differences rather than subtle ones. Only in a few cases is there evidence that small differences in appearance have any effect on subsequent behavior. An early set of investigations probed the effect of wearing glasses on impression formation (30, 31). It was found that for both judgments made in person and from photographs, persons wearing glasses were seen as more intelligent and industrious than the same people not wearing glasses. However, a more recent study (29) has demonstrated that persons wearing glasses are rated lower in attractiveness than they are without glasses. Setting aside for a moment the specific findings, it is clear that eyeglasses are at least one feature of one's overall appearance which apparently do have an effect on first impressions.

Glasses may be viewed from two different perspectives in terms of impression formation. First, the glasses may be seen as an ornament which serves not only a utilitarian function but a decorative one as well. But, second, glasses may also be seen as a visible sign that a person has a physical failing. People would probably not wear the glasses if they could see properly without them. In a more general sense, an ornament may be a positive addition to one's appearance

but glasses also carry with them a negative attribution. This general line of reasoning might explain why glasses seem to be a positive element in some senses but a negative one in others.

In the present study, the interest was in ornamentation without any negative overtones. We were interested in examining a small difference in appearance but one which enhanced the total effect rather than detracted from it in any way. The opportunity to test this question occurred in a large midwestern city. In one of the city's better restaurants, waitresses agreed to participate in a study of the nonverbal effects of ornamentation. Specifically, they would slightly change their usual appearance by placing a flower in their hair. If this flower made any positive difference in their outward appearance, then one way to measure the effect of this change would be to examine the amount of the tip left by patrons of the restaurant. Hence, our hypothesis is:

Diners will leave a larger tip for a waitress who wears a flower in her hair than for the same waitress without a flower.

METHOD

Subjects

The subjects in this study were patrons dining in a group or alone at a restaurant. Only groups who ordered food and were predominately adult were included in the study. Given the field nature of the study none of the subjects were debriefed nor, to the best of our knowledge, did any diner ever realize that an investigation was being conducted.

Sampling locale

The restaurant is located in a prime business area a few blocks from Lake Michigan. Within the restaurant, there are four semi-private dining rooms with a total seating capacity of 200. The name of this establishment appears with some frequency on the list of the 10 best restaurants in the city published by a variety of organizations. A patron entering the restaurant might be shown to a seat in a dining room with a large overhead crystal chandelier, subdued lighting, high-backed velvet chairs, 19th century oil paintings on the walls and mirrored pillars. The white table linens are changed after every person dines and candle light is used to enhance the atmosphere. The average meal, as measured in this study, cost \$10.20.

Experimenters

Six waitresses agreed to serve as experimenters for this study. The work experience of the waitresses averaged six and a half years ranging from one years experience to 13 years of experience. Each waitress was cautioned to wear the same jewelry, perfume, makeup and hair style throughout the sampling period. The standard restaurant waitress' "uniform"

never-varied of course. The only change in their usual appearance was the addition of a flower to be worn in their hair.

Procedure

Each of the six experimenters collected data for four nights; on two nights they wore a flower, on two nights they did not. The two conditions were randomly assigned to each experimenter by the principle investigator immediately prior to the evening's work. Each waitress in the flower condition was provided with a selection of flowers from which one was chosen for the evening. Data collection was done by direct observation. Each waitress recorded the characteristics of the patrons i. e. number, gender, etc. as well as the amount of the tip received.

RESULTS

Reliability

Perhaps the first question to be asked of any investigation concerns the reliability of the data. The data in the present study were gathered by direct observation. The presence or absence of the flower was directly observed by the principal investigator on the evening(s) when sampling occurred. Characteristics of the diners, including the amount of the tip left, were recorded by each waitress immediately upon the departure of the patrons. Undoubtedly, a few errors are probably present in the data but we would suspect that their effect is negligible given the immediacy of the recording of observations.

Validity

In order to obtain their cooperation, the waitresses were told the purpose of the study. It is entirely possible that we could be demonstrating a case of the self-fulfilling prophecy (22) and not the effect of ornamentation on behavior. Because the experimenters knew the "right" answers to the research question, the theory goes, they may have unconsciously behaved in such a way as to insure that the expected results became the actual results. As an attempt to guard against this possibility, each experimenter was informally queried about the study. Two of the women thought this study was totally stupid; one was noncommittal; three were enthusiastic. If the self-fulfilling prophecy were operating here, we would expect our results to follow this pattern. As we shall see, they do not.

The second threat to the validity of the study was a person outside the study altogether: the hostess. Upon entering the restaurant, all patrons are greeted by the hostess who guides the party to a table where they are seated. Thus, the hostess controls the flow of customers to each waitress. To insure that the hostess did not seat the big spenders in one section and the poor cousins in another, not only did she not know the hypothesis under investigation but she was totally unaware that a study was being conducted at all.

The final threat to validity lies in an attribute, or the lack of it, in the experimenters per se. It is now well known that attractive persons seem to obtain more benefits than unattractive persons (2). A great deal of what we attribute to attire may be the result of attraction rather than clothing. In many past studies, the appeal of the person and

the appeal of the clothing of the person are so badly confounded that interpretation is virtually impossible. The problem becomes more serious as the number of experimenters diminishes. For example, some studies have used only one experimenter (7), others have used but two (9, 15, 26). By using six experimenters, all serving in both conditions, the effects of attraction have not been eliminated but they have, we feel, been considerably diminished.

Analysis

The primary hypothesis of this study posited that when a waitress wore a flower in her hair, she would receive a larger tip than when she did not wear a flower. It was recognized that a number of other factors might confound this measurement. For example, the more people there are in the dining party, the larger the bill is likely to be and the larger the resultant tip. Hence, the measure chosen was the amount of the tip per person. Using this measure, the hypothesis is strongly supported. When a flower is worn, the amount of the tip increases substantially beyond the amount received by the same waitress with no flower in her hair ($t = 3.13$; $df = 374$; $p < .001$, one-tailed test).

However, knowing the overall trend does not answer the question of whether or not some waitresses may be doing very well while others are losing money. Separate analyses of each waitress were undertaken to answer this question. The data revealed that the waitress could expect to receive an average of \$.26 per person more when wearing the flower than she would without the flower. While some waitresses increased

their tips more than others, every waitress increased in the predicted direction.

In addition, we were interested in discovering whether any other variable might have intervened and could possibly be causing the observed result. Further analysis revealed that neither the particular dining room worked nor the day of the week affected the amount of the tip. A further possibility was that the flower might have somehow caused diners to spend more on the meal and, having spent more total money, to increase the size of the tip. However, the cost of the meal per person did not differ by condition. Finally, we speculated that even though the cost of the meal per person did not differ, larger parties--and therefore larger bills--could have somehow been assigned to the flower condition. They were not.

The only variable apparently related to the size of the tip was the sex composition of the party. The most generous tippers, as a group, appear to be all males (Table 1). The most frugal tippers are the all female groups (Table 1). To keep the results in perspective, it is

Insert Table 1 about here

worth noting that the tips from all groups increased with the presence of a flower.

Since groups of all males and all females consistently differed (Table 1), these two groups of diners were analyzed separately to determine

the effect of the flower. As we might have suspected after an examination of the cell means (Table 1), there is a strong main effect for the flower ($F(1,112) = 3.87$; $p < .05$) as well as for the sex composition of the group ($F(1,112) = 15.87$; $p < .0003$). Interestingly, the effect is due to a significant increase in tips left by women diners (\$.39) rather than by an increase for men (\$.15).

Finally, we are concerned with the importance of these findings. Granting the fact that statistical significance was achieved, to what extent does knowledge of the dependent variable assist us in predicting the independent variable? The point-biserial correlation between flower and tips reveals that the presence or absence of the flower explains about two and a half percent of the variance ($r = .16$; $N = 376$; $p < .001$; $r^2 = .0255$).

On a more pragmatic basis, we calculated that the typical waitress would realize an additional \$5.85 for each eight hour shift of work. In one year's time, this would amount to an additional \$1462.50 using a five day week with two weeks of vacation. This amount of course is the gross figure. The cost for the flowers would have to be deducted before we would have the net amount realized.

DISCUSSION

Perhaps the most obvious finding of the present study is that an item of apparel, in this case an ornament, clearly does have an impact on the subsequent behavior of restaurant diners. The very clear response (the tip) made to the presence of a stimulus (the flower) is evidence that

there must be some link between the two. The nature of this link, we believe, is the message of attire. If the presence of the flower projected no message, then there would have been no difference in the tips received in either condition. Since there was a strong difference, some sort of implicit link must exist i. e. a message is being received. At this point we will argue that it is of small moment that the message may be unintended. Whether we like it or not, others are forming impressions of us and are reacting to those impressions based on our attire.

It is also not surprising that we should have found women to tip less than men. The available evidence indicates that employed women earn about 60% of the salary of employed men in the same job categories (27). If we consider the tips rendered in the control condition, groups of men left tips averaging \$1.83 per person while groups of women left tips averaging \$1.16 per person. Thus, the women's tips were 63% of those left by men--very close to the income differential. What is surprising is that it should be only the women whose tips increase in the flower condition. As nearly as we can ascertain, there are two lines of reasoning to account for this outcome.

It may be that there is a "ceiling effect" for the amount of the tip regardless of any other factors involved. Perhaps the men would not increase their tips under any circumstances if they are near that ceiling. On the other hand, perhaps the flower was differentially effective with male and female diners. It may be that the women noticed and responded to the blossom and the men did not. In either case, it is the increased

tips from females rather than from the males causing the most noticeable differences in this study.

In a much larger sense, the results of this study suggest that there may be a category of stimuli which carry a much greater impact than chance alone would seem to dictate. For the most part, such items appear to fall into the area of clothing accessories. Specifically, we refer to the impact of lipstick (23), neckties (12), glasses (30, 31) and now, a flower. A review of each of these studies indicates that the effect of such apparel is slight and most certainly subtle. Nonetheless, the effects seem to be present.

The data obtained in this study points to the fact that apparel does not seem to explain an overwhelming amount of the variance in human interaction situations. Only 2.5% of the variance of tipping was accounted for by wearing or not wearing a flower. This is, however, not terribly surprising. No matter how well dressed a waitress, service is still the most important element from the perspective of the diner. A waitress who fails to provide the most basic amenities cannot expect much of a gratuity regardless of her attire. But the fact that every waitress increased the average amount of tips received when wearing a flower, argues that the flower tended to create a more receptive atmosphere in which the total service was evaluated. What we did not suspect before now is how fine the perceptual differentiation is among slight changes in attire.

It would be easy to overstate the case at this point--a failing we shall try to avoid. While the results indicate that a flower worn in the hair of a waitress has an effect on the behavior of restaurant patrons, that

effect is probably not strong enough to be viewed as either a necessary or a sufficient condition for an outward positive reaction. Rather, it is likely that the flower provided only one element in the total gestalt of the situation. The obtained results support the contention that the flower is a positive element in the total equation of satisfaction even if it is a small element. Perhaps the most important feature to note is that the positive element of the flower was an attribute of the waitress per se as distinguished from any characteristic of the restaurant or of the food. Thus, the positive bond would create a more favorable light in which to view the service provided. Such a favorable disposition may not have even been at the conscious level; had the customers been queried about the work of the waitress, it is doubtful that rave notices would have been forthcoming based on the presence or absence of a flower. Indeed, it would be most unusual if any evaluations of the service included the observation that the waitress wore a flower. But the fact is that the flower did make a pronounced difference in patron reactions. This study, along with the previous ones (12, 23, 29, 30, 31), supports the contention that small, seemingly insignificant items of attire may serve as precipitators of behavior. If this notion is accurate, future studies concerning the nonverbal impact of attire must begin to take such precipitators into account. For the present, we can only say with certainty that the wearing of a flower appears to enhance the probability of a favorable response toward a waitress as measured by an increased tip.

REFERENCES

1. Lewis R. Aiken, "The Relationships of Dress to Selected Measures of Personality in Undergraduate Women," JOURNAL OF SOCIAL PSYCHOLOGY, 59 (1963) 119-128.
2. Ellen Berscheid and Elaine Walster, "Physical Attractiveness," in Leonard Berkowitz (ed.), ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY, Vol. 7 (New York: Academic Press, 1974).
3. Leonard Bickman, "Clothes Make the Person," PSYCHOLOGY TODAY, 4 (1974) 49-54.
4. Hilda Mayer Buckley and Mary Ellen Roach, "Clothing as a Nonverbal Communicator of Social and Political Attitudes," HOME ECONOMICS RESEARCH JOURNAL, 3 (1974) 94-102.
5. Judee K. Burgoon and Thomas Saine, THE UNSPOKEN DIALOGUE (Boston: Houghton Mifflin, 1978).
6. J. Eugene Clements, D.B. Tracy and John Platt, "Effect of Punitive Dress on Classroom Behavior of Institutionalized Emotionally Disturbed Adolescents," PSYCHOLOGICAL REPORTS, 39 (1976) 335-338.
7. Peter Crassweller, Mary Alice Gordon and W. H. Tedford, Jr., "An Experimental Investigation of Hitchhiking," JOURNAL OF PSYCHOLOGY, 82 (1972) 43-47.
8. Valerian J. Derlega and Alan L. Chaikin, SHARING INTIMACY (Englewood Cliffs, N.J.: Spectrum, 1975).
9. James H. Fortenberry, Joyce MacLean, Priscilla Morris and Michael O'Connell, "Mode of Dress as a Perceptual Cue to Deference," JOURNAL OF SOCIAL PSYCHOLOGY, 104 (1978) 139-140.

10. Keith Gibbins, "Communication Aspects of Women's Clothes and their Relation to Fashionability," BRITISH JOURNAL OF SOCIAL AND CLINICAL PSYCHOLOGY, 8 (1969) 301-312.
11. Keith Gibbins and Tonya K. Gwynn, "A New Theory of Fashion Change: A Test of Some Predictions," BRITISH JOURNAL OF SOCIAL AND CLINICAL PSYCHOLOGY, 14 (1975) 1-9.
12. W. Paul Green and Howard Giles, "Reactions to a Stranger as a Function of Dress Style: The Tie," PERCEPTUAL AND MOTOR SKILLS, 37 (1973) 676.
13. Lois M. Gurel, June C. Wilber and Lee Gurel, "Personality Correlates of Adolescent Clothing Styles," JOURNAL OF HOME ECONOMICS, 64 (1972) 42-47.
14. Paul N. Hamid, "Changes in Person Perception as a Function of Dress," PERCEPTUAL AND MOTOR SKILLS, 29 (1969) 191-194.
15. Mary B. Harris and Gail Bays, "Altruism and Sex Roles," PSYCHOLOGICAL REPORTS, 32 (1973) 1002.
16. Randall P. Harrison, BEYOND WORDS (Englewood Cliffs, N. J.: Prentice-Hall, 1974).
17. Ernest R. Hilgard and Donald G. Marquis, CONDITIONING AND LEARNING (Revised by Gregory A. Kimble), (New York: Appleton-Century-Crofts, 1961).
18. J. Kelley, "Dress as Non-Verbal Communication," Paper presented to the annual Conference of the American Association of Public Opinion Research, May, 1969.
19. Mark L. Knapp, NONVERBAL COMMUNICATION IN HUMAN INTERACTION, (2nd ed.), (New York: Holt, Rinehart and Winston, 1978).

20. Dale G. Leathers, **NONVERBAL COMMUNICATION SYSTEMS** (Boston: Allyn and Bacon, 1976).
21. Eugene W. Mathes and Sherry B. Kempher, "Clothing as a Nonverbal communicator of Sexual Attitudes and Behavior," **PERCEPTUAL AND MOTOR SKILLS**, 43 (1976) 495-498.
22. Robert K. Merton, **SOCIAL THEORY AND SOCIAL STRUCTURE** (New York: Free Press, 1957).
23. W. J. McKeachie, "Lipstick as a Determiner of First Impressions of Personality," **JOURNAL OF SOCIAL PSYCHOLOGY**, 36 (1952) 241-224.
24. J. Paull Neilsen and Anne Kernalleguen, "Influence of Clothing and Physical Attractiveness in Person Perception," **PERCEPTUAL AND MOTOR SKILLS**, 42 (1976) 775-780.
25. Laurence B. Rosenfeld and Timothy Plax, "Clothing as Communication," **JOURNAL OF COMMUNICATION**, 27 (1977) 24-31.
26. R. Steven Schiavo, Barbara Sherlock and Gail Wicklund, "Effect of Attire on Obtaining Directions," **PSYCHOLOGICAL REPORTS**, 34 (1974) 245-246.
27. Ralph R. Sell and Michael P. Johnson, "Income and Occupational Differences Between Men and Women in the United States," **SOCIOLOGY AND SOCIAL RESEARCH**, 62 (1977) 1-20.
28. Lucy C. Taylor and Norma H. Compton, "Personality Correlates of Dress Conformity," **JOURNAL OF HOME ECONOMICS**, 60 (1968) 653-656.
29. Roger L. Terry and David L. Kroger, "Effects of Eye Correctives on Ratings of Attractiveness," **PERCEPTUAL AND MOTOR SKILLS**, 42 (1976) 42.

30. G. R. Thornton, "The Effect Upon Judgments of Personality Traits of Varying a Single Factor in a Photograph," JOURNAL OF SOCIAL PSYCHOLOGY, 18 (1943) 127-148.
31. G. R. Thornton, "The Effect of Wearing Glasses upon Judgments of Personality Traits of Persons Seen Briefly," JOURNAL OF APPLIED PSYCHOLOGY, 28 (1944) 203-207.
32. David P. Vielhaber and Edward Gottheil, "First Impressions and Subsequent Ratings of Performance," PSYCHOLOGICAL REPORTS, 17 (1965) 916.

Footnotes

¹In this paper so much of the design, thinking and work was shared that the "first" or "second" author in the usual sense would be misleading. Neither of us could have completed the study without the other. Hence, the order of names was decided by a random draw.

Table 1

Tip per person by group Composition
and Condition

Group Composition

Condition

No Flower

Flower

All Female	Majority Female	Equal	Majority Male	All Male
1.16a	1.667ab	1.43ab	1.37ab	1.83b
1.55ab	1.674ab	1.52a	1.93ab	1.98b
1.36a	1.67ab	1.47a	1.54ab	1.92b

(F (4,179) = 4.99; $p < .001$)(F (4,179) = 3.39; $p < .01$)(F (4,354) = 7.92; $p < .001$)

^{ab}Subsets of groups, no pair of which have means that differ by more than the shortest range at the .05 level using Scheffe's test.